

STOR 15-0037

S04 Web date: 11/20/2012



**King County**  
**Department of Permitting**  
**and Environmental Review**  
35030 SE Douglas Street, Suite 210  
Snoqualmie, WA 98065-9266  
**206-296-6600** TTY Relay: 711  
www.kingcounty.gov

RECEIVED

JUL 28 2015

KING COUNTY  
D.P.E.R.

## SEPA CHECKLIST

For alternate formats, call 206-296-6600.

### Purpose of the checklist

The State Environmental Policy Act (SEPA), RCW Chapter 43.21 C, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An Environmental Impact Statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

### Instructions for the applicants

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply". Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations such as zoning, shoreline and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.

#### **A. Background**

1. Name of the proposed project, if applicable:

YMCA Camp Terry

2. Name of applicant:

Dave Mayer  
Executive Director  
Sammamish Family YMCA

MAIN FILE COPY



5800-219042

3. Address and phone number of applicant and contact person:

Consultants: Kenny Booth or Nell Lund  
The Watershed Company  
750 6<sup>th</sup> Street South  
Kirkland, WA 98033  
425-822-5242

Dave Mayer  
Executive Director  
Sammamish Family YMCA  
4221 228<sup>th</sup> Ave SE, Ste. C  
Issaquah, WA 98029  
425-391-4840

4. Date checklist prepared: July 7, 2015

5. Agency requesting checklist: King County DPER

6. Proposed timing or schedule (including phasing, if applicable):

Project timing is dependent on issuance of permits and fundraising.

7. Do you have any plans for future additions, expansion or further activity related to or connected with this proposal? ☐ Yes ☒ No If yes, explain.

Not at this time.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Critical Areas Delineation and Classification Study. By Wetland Resources, Inc. March 2013.

Site Survey. By Pace Engineers. Received March 11, 2013.

Critical Area Report, YMCA Camp Terry Critical Area Alteration Exception. Prepared by The Watershed Company. June 2015.

YMCA Camp Terry Impact and Mitigation Assessment Plan. Prepared by The Watershed Company. June 2015.



9. Do you know whether applications are pending for government approvals of other proposals directly affecting the property covered by your proposal? ☐ Yes ☒ No If yes, explain.

10. List any government approvals or permits that will be needed for your proposal, if known.

Building permit, King County  
Clearing and grading permit, King County  
SSDP, King County  
CAAE, King County

11. Give brief complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The proposed project involves improvements to the 10.2 acre historic YMCA Camp Terry on the Raging River. Under the proposed site plan, several existing structures would be removed and replaced with new structures better suited to current camp programs. To maximize programmatic goals, structural improvements are proposed. Several existing A-frame cabins, picnic shelters, and old shelter foundations will be removed, all totalling 3,190 SF. Proposed replacement structures are a welcome center, teepee shelters, a house addition, shelter expansion, gaga pit (a small hexagonal ball court) and footbridge, all totalling 7,630 SF. A 4,440 SF net increase in structural footprints onsite is proposed.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site or sites. Provide a legal description, site plan, vicinity map and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications to this checklist.

Camp Terry is located at 31112 SE 85<sup>th</sup> Place, Peston, WA 98027. Parcel # 3324079034. NW 1/4 Section 33, Township 24N, Range 7E. Legal description: PP ACT 39111067 MOBILE HOME POR OF N 1/2 OF NW 1/4LY E OF SUNSET HIWAY & SLY & WLY OF NXN LNS ONE LN BEG ELY MRG OF SD HWY 927 FT SLY MEAS ALG HWY FROM N LN OF SECT & BEARING S 55-00-00 E & A LN BEG ON S LN OF SUBDIV 542 FT E OF ELY MRG OF SD HWY & BEARING N 28-00-00 E LESS C/M RGTS TGW LOTS 1-2-3 BLK 10 PRESTON 1ST ADD TO & ELY 1/2 VAC ST ADJ SD LOTS LY SLY OF LN EXT ELY FR NE COR LOT 6 BLK 6 OF SD PLAT & TGW POR OF PLAT DESG CITY PARK

See the Critical Areas Study for a site plan, vicinity map. A topographic map is attached.



To be completed by applicant	Evaluation for Agency Use Only
<p><b>B. Environmental elements</b></p> <p><b>1. Earth</b></p> <p>a. General description of the site (check one)</p> <p> <input type="checkbox"/> Flat  <input type="checkbox"/> Rolling  <input type="checkbox"/> Hilly  <input type="checkbox"/> Steep slopes  <input type="checkbox"/> Mountainous  <input checked="" type="checkbox"/> Other: <u>Combination of slopes, hummocks, and flats</u> </p> <p>b. What is the steepest slope on the site (approximate percent of slope)?  approximately 45 percent</p> <p>c. What general types of soil are found on the site (i.e., clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.</p> <p>According to NRCS soil maps, the majority of the site contains Pilchuck loamy fine sand (Pc); Neilton very gravelly loamy sand, 2 to 15 percent slopes (NeC) is mapped on the northwest edge of the site.</p> <p>d. Are there surface indications or history of unstable soils in the immediate vicinity? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If so, describe.</p> <p>There is evidence of prior Raging River channel migration in the floodway. The foundation of an old teepee shelter was partially washed out by previous flood flows.</p> <p>e. Describe the purpose, type and approximate quantities of any filling or grading proposed. Indicate source of fill.</p> <p>Several existing structures, totalling 1,490 SF will be removed from the floodplain. Replacement structures totalling 550 SF are proposed, including shelter beam footings and expansion of an existing shelter.</p>	



To be completed by applicant	Evaluation for Agency Use Only
<p>f. Could erosion occur as a result of clearing, construction or use?  <input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No   If so, generally describe.            There may be some temporary disturbances during construction that could cause erosion. BMPs will be used to minimize the extent of any temporary disturbance and replanting or reseeding will be done as needed for long term soil stabilization.</p> <p>g. About what percent of the site will be covered with impervious surfaces after project construction (i.e., asphalt or buildings)?            approximately 5 percent of the site would be covered with impervious surface once site improvements are implemented.</p> <p>h. Proposed measures to reduce or control erosion or other impacts to the earth, if any:            All clearing and grading construction would be in accordance with King County Clearing &amp; Grading permit conditions and shall comply with erosion and sediment control measures detailed in KCC 16.82.095. Standard best management practices (BMPs) will be used before and during construction to minimize erosion and sedimentation. BMPs include, but are not limited to, use of silt fences, compliance with a timing restrictions, and restoration of disturbed vegetation.</p>	
<p><b>2. Air</b></p> <p>a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke, greenhouse gases) during construction and when the project is completed? If any, generally describe and give approximate quantities if known?            Any air quality impacts from construction vehicle emissions, building demolition/construction and associated dust generation would be temporary and rapidly dissipated. When construction is complete the proposed site improvements may increase traffic to the camp, but vehicle access would be limited to the parking/drop-off area.</p> <p>b. Are there any off-site sources of emissions or odor that may affect your proposal?   <input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No   If so, generally describe.</p>	



To be completed by applicant	Evaluation for Agency Use Only
<p>c. Proposed measures to reduce or control emissions or other impacts to air, if any:</p> <p>Standard methods of reducing impacts to air would be utilized and include keeping all heavy equipment in good operating condition and managing disturbed soils as described in 1h above. To reduce dust generation, exposed soils and soils stockpiles would be covered or watered during grading or during dry periods when they are subjected to equipment traffic.</p> <p><b>3. Water</b></p> <p>a. Surface:</p> <p>1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, salt water, lakes, ponds, wetlands)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe type and provide names. If appropriate, state what stream or river it flows into.</p> <p>The subject property is in the Raging River basin of the Snoqualmie River watershed (WRIA 7). It is located on the left bank of the Raging River; the property contains one wetland (Wetland A) and a tributary stream (Terry Creek). Wetland A is a Category II wetland with high habitat functions; it requires a 300 foot buffer. The Raging River and Terry Creek are salmonid/fish-bearing streams, each requires a 165 foot buffer.</p> <p>2. Will the project require any work over, in or adjacent to (within 200 feet) the described waters? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please describe and attach available plans.</p> <p>Site improvements, including removal of existing structures and new construction, will be within 200 feet of the on-site wetland and/or streams. See attached plans.</p> <p>3. Estimate the amount of fill and dredge material that would be placed or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.</p> <p>No filling or dredging are proposed within on-site wetlands or streams. Some invasive plant removal is included in the proposed mitigation plan and will be conducted with care.</p>	







To be completed by applicant	Evaluation for Agency Use Only
<p>c. Water runoff (including stormwater):</p> <p>1. Describe the source of runoff (including stormwater) and method of collection and disposal, if any. Include quantities, if known. Where will this water flow? Will this water flow into other waters? If so, describe.</p> <p>Runoff from new and replaced impervious surfaces within Camp Terry will be managed in accordance with requirements in the 2009 King County Surface Water Design Manual and any other applicable guidelines.</p> <p>2. Could waste materials enter ground or surface waters?  <input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No   If so, generally describe.</p> <p>The likelihood of waste streams entering surface or groundwater for the proposed project is low. The majority of the site will remain in a native vegetated condition. Stormwater collected from road and parking lot surfaces will be treated to the County's water quality standards. Waste materials could enter surface waters in the event of a spill or other accident. Measures will be taken to prevent such spills and accidents</p> <p>d. Proposed measures to reduce or control surface, ground and runoff water impacts, if any:</p> <p>BMPs will be followed during construction to avoid incidental impacts.</p>	
<p><b>4. Plants</b></p> <p>a. Check or circle types of vegetation found on the site:</p> <p><input checked="" type="checkbox"/> Deciduous tree: alder, maple, aspen, other</p> <p><input checked="" type="checkbox"/> Evergreen tree: fir, cedar, pine, other</p> <p><input checked="" type="checkbox"/> Shrubs</p> <p><input checked="" type="checkbox"/> Grass</p> <p><input type="checkbox"/> Pasture</p> <p><input type="checkbox"/> Crop or grain</p> <p><input checked="" type="checkbox"/> Wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other</p> <p><input type="checkbox"/> Water plants: water lily, eelgrass, milfoil, other</p> <p><input type="checkbox"/> Other _____</p>	



To be completed by applicant	Evaluation for Agency Use Only
<p>b. What kind and amount of vegetation will be removed or altered?</p> <p>New/replacement structures are generally sited over lawn grass or on bare dirt.</p> <p>c. List threatened or endangered species known to be on or near the site.</p> <p>No threatened or endangered plants are known to occur on or near the site.</p> <p>d. Proposed landscaping, use of native plants or other measures to preserve or enhance vegetation on the site, if any:</p> <p>The site is largely maintained as intact native forest; the site will continue to be utilized in a manner that preserves and minimizes impacts to the site's natural environment. Proposed mitigation includes planting in the on-site wetland and improving the riparian corridor of Terry Creek.</p>	
<p><b>5. Animals</b></p> <p>a. Check or circle any birds and animals which have been observed on or near the site:</p> <p><input checked="" type="checkbox"/> Birds: hawk, heron, eagle, songbirds, other</p> <p><input checked="" type="checkbox"/> Mammals: deer, bear, elk, beaver, other</p> <p><input checked="" type="checkbox"/> Fish: bass, salmon, trout, herring, shellfish, other</p> <p>b. List any threatened or endangered species known to be on or near the site.</p> <p>WDFW PHS on the Web shows Chum (<i>Oncorhynchus keta</i>), Coho (<i>O. kisutch</i>), and Bull Trout (<i>Salvelinus malma</i>) in Terry Creek. Gray wolf (<i>Canis lupus</i>) is mapped in the Township. PHS mapping for adjacent areas also includes Pink salmon, Chinook salmon, winter steelhead, cutthroat</p> <p>c. Is the site part of a migration route? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If so, explain.</p> <p>Migrating salmonids use the onsite streams.</p>	



To be completed by applicant	Evaluation for Agency Use Only
<p>d. Proposed measures to preserve or enhance wildlife, if any:</p> <p>The proposed mitigation plan would reduce invasive plant cover, increase native plant cover and diversity, provide more habitat niches, and increase shading of salmonid-bearing Terry Creek.</p> <p><b>6. Energy and natural resources</b></p> <p>a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.</p> <p>Since camp hours are primarily dawn to dusk, minimal lighting is anticipated in final designs. The welcome center and shelters will have open-air designs that allow natural light to penetrate.</p> <p>b. Would your project affect the potential use of solar energy by adjacent properties? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If so, generally describe.</p> <p>c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:</p> <p>Final designs are not yet complete, but as the concept drawings show, new/replacement structures will involve minimal construction and low-impact designs.</p>	



To be completed by applicant	Evaluation for Agency Use Only
<p><b>7. Environmental health</b></p> <p>a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill or hazardous waste that could occur as a result of this proposal? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If so, describe.</p> <p style="padding-left: 40px;">The only possibility of spill or other hazard would be associated with operation and fueling of heavy equipment used to construct the project. Typical hazards related to heavy equipment fuels are associated with construction of the proposed project.</p> <p>1. Describe special emergency services that might be required.</p> <p style="padding-left: 40px;">In the unlikely event of an accident (spill, fire, other exposure) the local fire department Hazmat team would respond. If necessary, local medical service may also be required. Standard emergency and response supplies would be on-site to treat any emergency.</p> <p>2. Proposed measures to reduce or control environmental health hazards, if any:</p> <p style="padding-left: 40px;">Standard precautions would be taken to ensure the safety of the work crew. The construction manager would be contacted by a crew member immediately upon discovery of a spill. The construction manager would then ensure that the spill is cleaned up and would contact the appropriate authorities.</p> <p>b. Noise</p> <p>1. What types of noise exist in the area which may affect your project (i.e., traffic, equipment, operation, other)?</p> <p style="padding-left: 40px;">None known. It is a rural/residential area.</p> <p>2. What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (i.e., traffic, construction, operation, other)? Indicate what hours noise would come from the site.</p> <p style="padding-left: 40px;">Short-term noise associated with the project would be restricted to use of construction-related equipment. Construction noise would be limited to standard King County working hours. Long-term noise would be similar to existing, ongoing camp activities.</p> <p>3. Proposed measures to reduce or control noise impacts, if any:</p> <p style="padding-left: 40px;">As mentioned above, noise generation would likely be limited to standard construction hours. Limited camp hours would control noise during hours of darkness.</p>	



To be completed by applicant	Evaluation for Agency Use Only
<p><b>8. Land and shoreline use</b></p> <p>a. What is the current use of the site and adjacent properties? YMCA day camp and residential homes.</p> <p>b. Has the site been used for agriculture? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If so, describe.</p> <p>c. Describe any structures on the site. The site contains a gravel parking lot, a house, 2 yurts, 9 A-frame cabins, 2 picnic shelters, a restroom, a environmental education shelter, foundations of 2 prior structures, a climbing wall, archery area, a viewing platform, trails, and a gravel access road.</p> <p>d. Will any structures be demolished? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If so, what? 9 A-frame cabins, 2 picnic shelters, 1 teepee shelter foundation, and an existing shelter that is being replaced.</p> <p>e. What is the current zoning classification of the site? RA-2.5 - rural area, one unit DU per 2.5 acres</p> <p>f. What is the current Comprehensive Plan designation of the site? rn - rural neighborhood commercial center</p> <p>g. If applicable, what is the current shoreline master program designation of the site? aquatic shoreline, conservancy shoreline</p>	



**To be completed by applicant****Evaluation for  
Agency Use  
Only**

- h. Has any part of the site been classified as an "environmentally sensitive" area? ☒ Yes ☐ No Is so, specify.

Camp Terry is completely encumbered by critical areas and buffers. The site contains one large wetland and two streams, the Raging River and a tributary. The site is also encumbered by severe and moderate channel migration zones designated by the county and the 100 year floodplain of

- i. Approximately how many people would reside or work in the completed project?

Summer camp programs serve approximately 3,000 people; annual use is estimated at 5,000 people. No significant increase is expected in these numbers.

- j. Proposed measures to avoid or reduce displacement impacts, if any:

No one resides at the day-use site. No measures are necessary.

- k. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed site improvements are consistent with historic and on-going site use.

## 9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle or low-income housing.

none, this project does not include residential housing.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle or low-income housing.

none.



**To be completed by applicant****Evaluation for  
Agency Use  
Only**

- c. Proposed measures to reduce or control housing impacts, if any:  
No measures are necessary.

**10. Aesthetics**

- a. What is the tallest height of any proposed structure or structures, not including antennas? What is the principal exterior building material or materials proposed?

The existing 1.5 story house is presumed to be the tallest structure at approximately 20-feet tall. The building exterior is wood siding. The height of the welcome center is currently undetermined as it is not yet fully designed.

- b. What views in the immediate vicinity would be altered or obstructed?

The proposed welcome center would provide views of the Raging River from what is currently a lawn area.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

Natural building materials and rustic designs will blend the new/replacement structures with the surrounding natural environment.

**11. Light and glare**

- a. What type of light and glare will the proposal produce? What time of day would it mainly occur?

Lighting is provided in the existing house and would be included in the welcome center. Occassional evening use of lighting is anticipated.

- b. Could light or glare from the finished project be a safety hazard or interfere with views? ☐ Yes ☒ No If yes, explain:







**To be completed by applicant****Evaluation for  
Agency Use  
Only****13. Historic and cultural preservation**

- a. Are there any places or objects listed on, or proposed for, the national state or local preservation registers known to be on or next to the site?  
☐ Yes ☒ No If so, generally describe.

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific or cultural importance known to be on or next to the site.

The fireplace and foundation of an old site homestead is still present. No other historic, archaeological, or cultural resources are known to be onsite.

- c. Proposed measures to reduce or control impacts, if any:

Should historic, archeological, scientific or cultural significant items be encountered during this project, work would be temporarily stopped while the appropriate agencies are notified and given time to assess/protect the resource(s). Compliance with all applicable laws pertaining to archaeological resources (RCW 27.53, 27.44 and WAC 25-48) is required. Failure to comply with this requirement could constitute a Class C Felony.

**14. Transportation**

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Interstate-90, SE 82<sup>nd</sup> Street, SE High Point Way, Preston-Fall City Road SE.

- b. Is the site currently served by public transit? ☐ Yes ☒ No  
 If not, what is the approximate distance to the nearest transit stop?

No buses serve the Preston area near Camp Terry.








To be completed by applicant	Evaluation for Agency Use Only
<p><b>15. Public services</b></p> <p>a. Would the project result in an increased need for public services (i.e., fire protection, police protection, health care, schools, other)?  <input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No   If so, generally describe.</p> <p>b. Proposed measures to reduce or control direct impacts on public services, if any:            No measures are necessary.</p> <p><b>16. Utilities</b></p> <p>a. Check utilities currently available at the site:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Electricity</li> <li><input type="checkbox"/> Natural gas</li> <li><input checked="" type="checkbox"/> Water</li> <li><input checked="" type="checkbox"/> Refuse service</li> <li><input checked="" type="checkbox"/> Telephone</li> <li><input type="checkbox"/> Sanitary sewer</li> <li><input checked="" type="checkbox"/> Septic system</li> <li><input type="checkbox"/> Other: _____</li> </ul> <p>b. Describe the utilities that are proposed for the project, the utility providing the service and the general construction activities on the site or in the immediate vicinity which might be needed.            Existing site services will be utilized.</p>	



**C. Signature**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

  
\_\_\_\_\_  
Signature

  
\_\_\_\_\_  
Date submitted

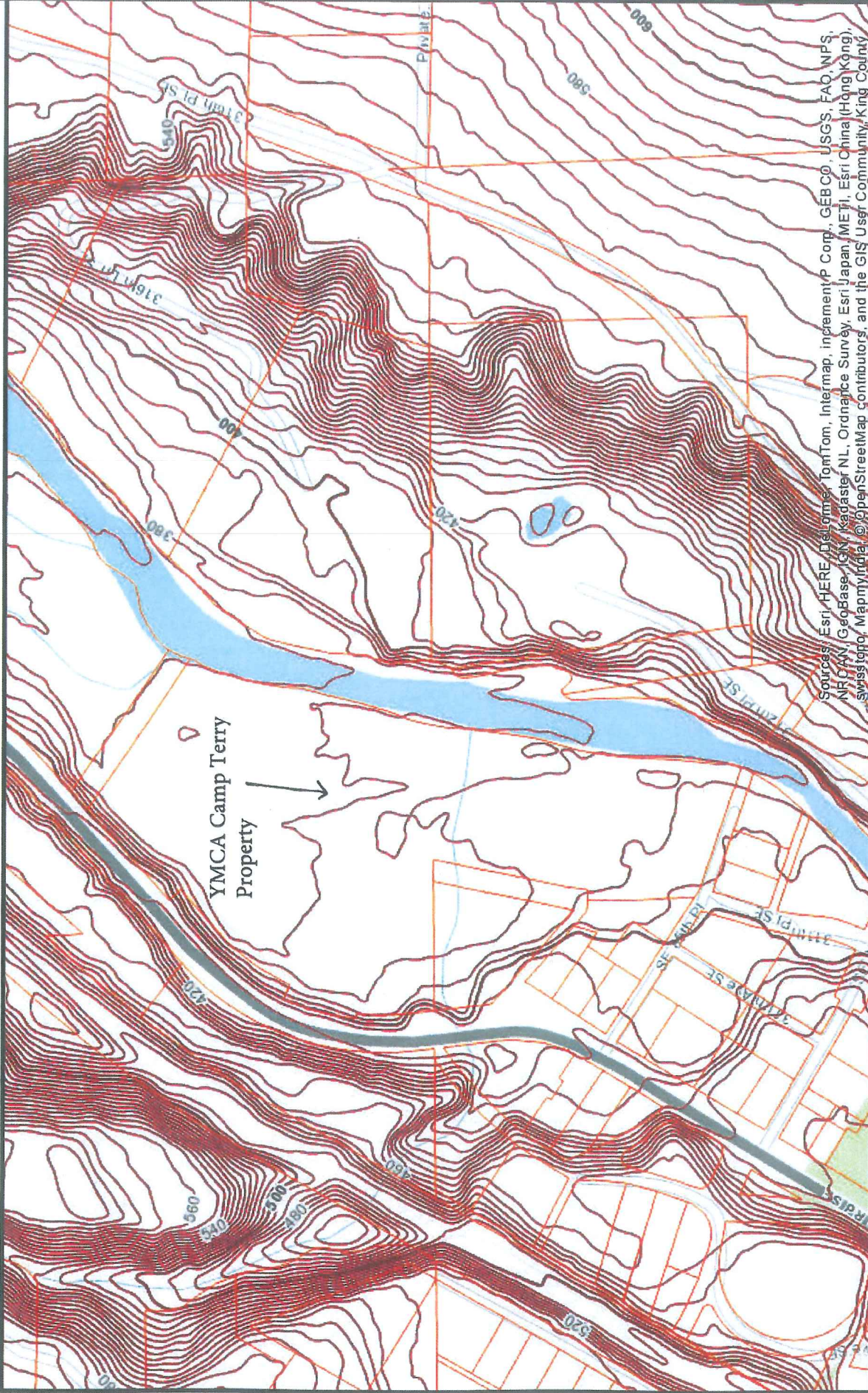
***Check out the Permitting Web site at [www.kingcounty.gov/permits](http://www.kingcounty.gov/permits)***







# YMCA Camp Terry



Sources: Esri, HERE, DeLorme, TomTom, Intermap, incrementP Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community, King County

The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a survey product. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

Date: 6/29/2015

Notes:



**King County**  
**GIS CENTER**









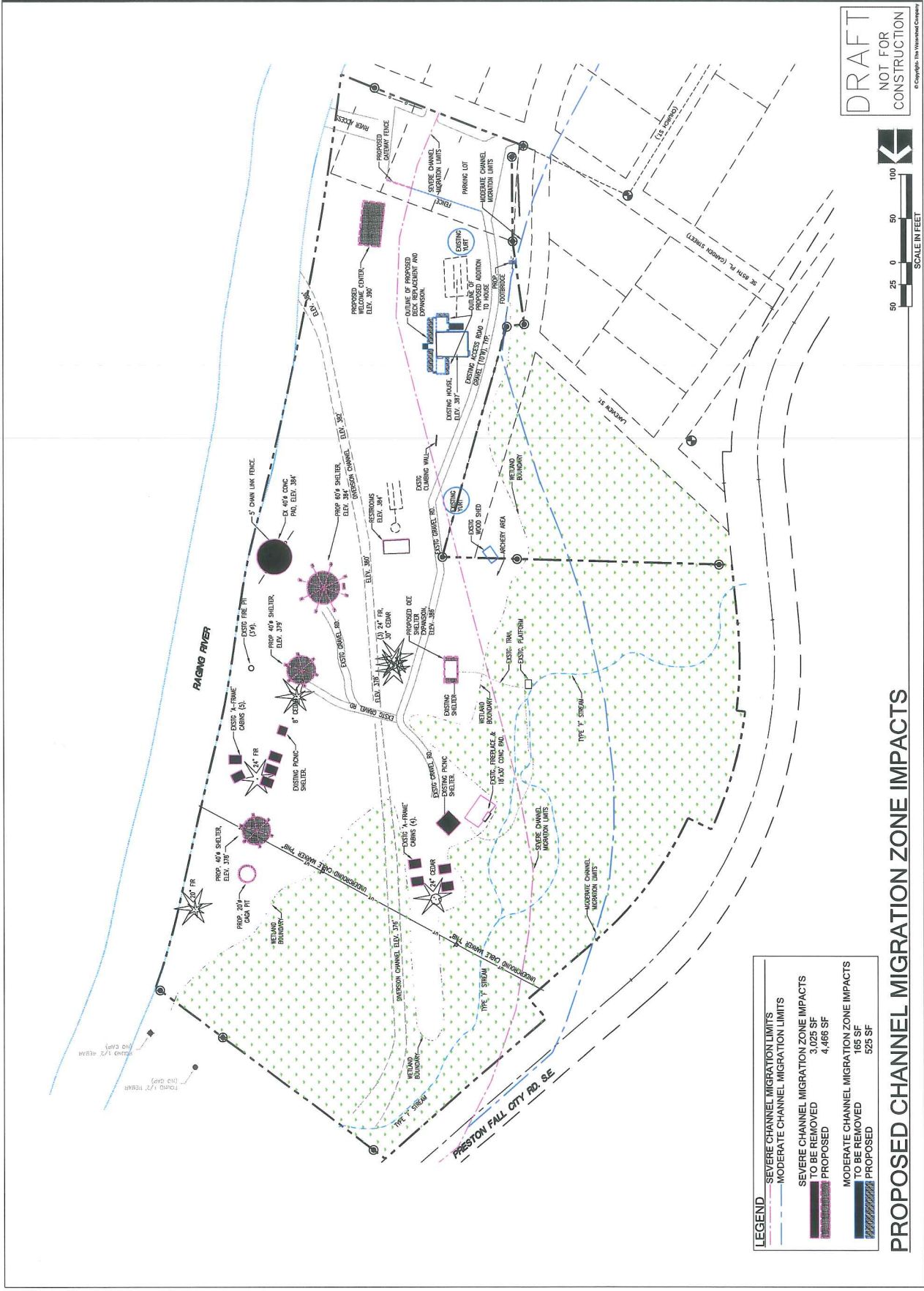
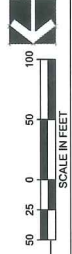






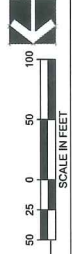
NO.	DATE	DESCRIPTION
1	04-08-15	REVIEW SET
2	05-08-15	DRAFT MITIGATION ASSESSMENT PLAN
3	06-12-15	IMPACT AND MITIGATION PLAN
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		

DRAFT  
 NOT FOR CONSTRUCTION



PROPOSED CHANNEL MIGRATION ZONE IMPACTS

SEVERE CHANNEL MIGRATION LIMITS	
MODERATE CHANNEL MIGRATION LIMITS	
SEVERE CHANNEL MIGRATION ZONE IMPACTS	
TO BE REMOVED	3,023 SF
PROPOSED	4,466 SF
MODERATE CHANNEL MIGRATION ZONE IMPACTS	
TO BE REMOVED	165 SF
PROPOSED	525 SF

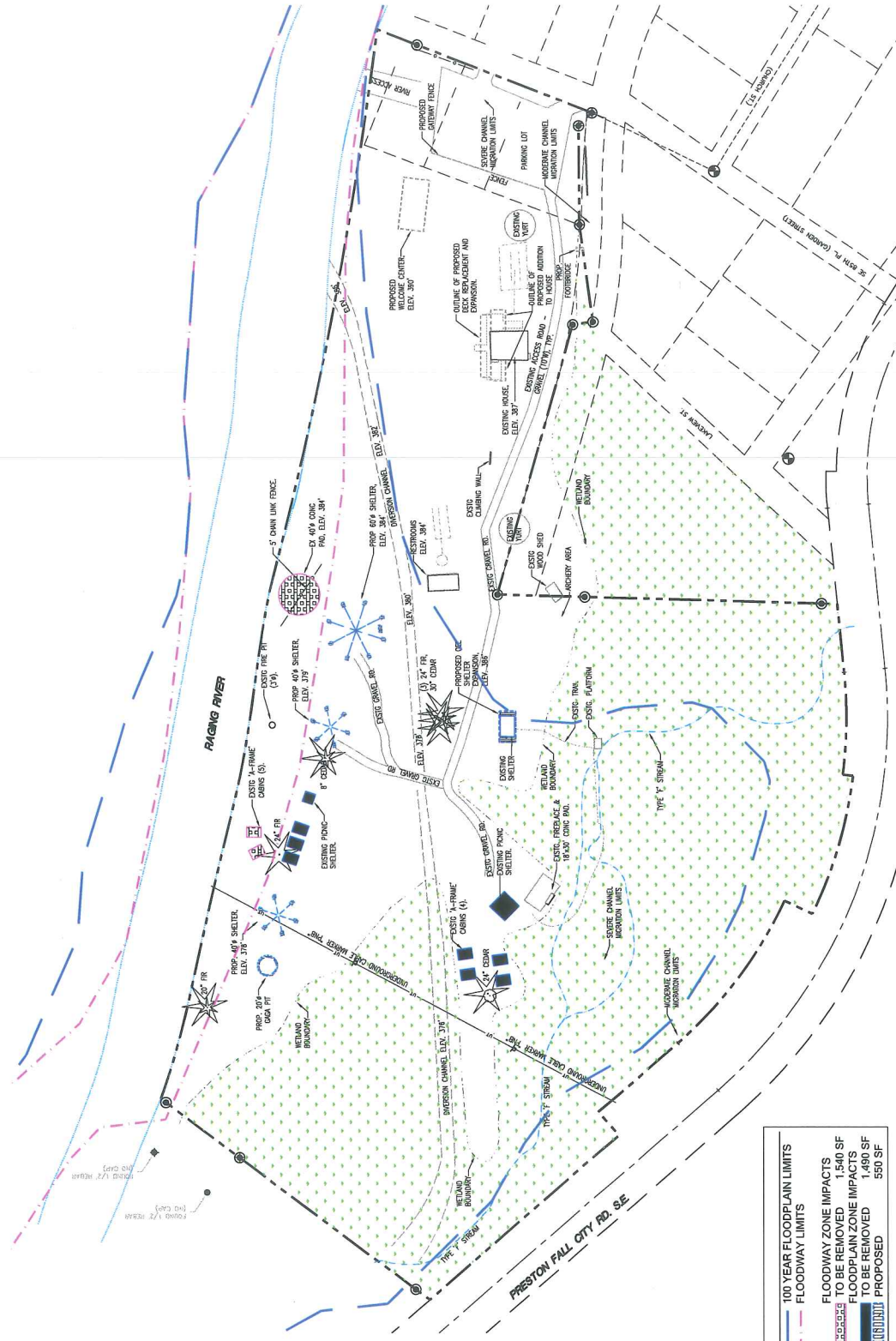








SUBMITTALS & REVISIONS		NO.	DATE	DESCRIPTION	BY
MSF	1	04-08-15	REVIEW SET		
MSF	2	02-08-15	DRAFT MITIGATION ASSESSMENT PLAN		
MSF	3	02-12-15	IMPACT AND MITIGATION PLAN		
SHEET SIZE: 11x17 (Landscape) GRAPHIC SCALE: 1" = 50'					
PROJECT MANAGER: NL DESIGNED BY: NL CHECKED: NL JOB NUMBER: 150322					
SHEET NUMBER: 150322					
W3 OF 7					




**LEGEND**

- 100 YEAR FLOODPLAIN LIMITS
- FLOODWAY LIMITS
- FLOOD ZONE IMPACTS
- FLOODPLAIN ZONE IMPACTS
- TO BE REMOVED
- PROPOSED

**NOTE**  
 IMPACT ANALYSIS DOES NOT PROVIDE AN  
 ASSESSMENT OF FLOOD STORAGE VOLUME.

**DRAFT**  
 NOT FOR CONSTRUCTION

  
 SCALE IN FEET  
 0 25 50 100

**PROPOSED FLOODPLAIN AND FLOODWAY IMPACTS**

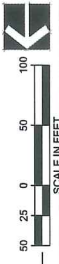
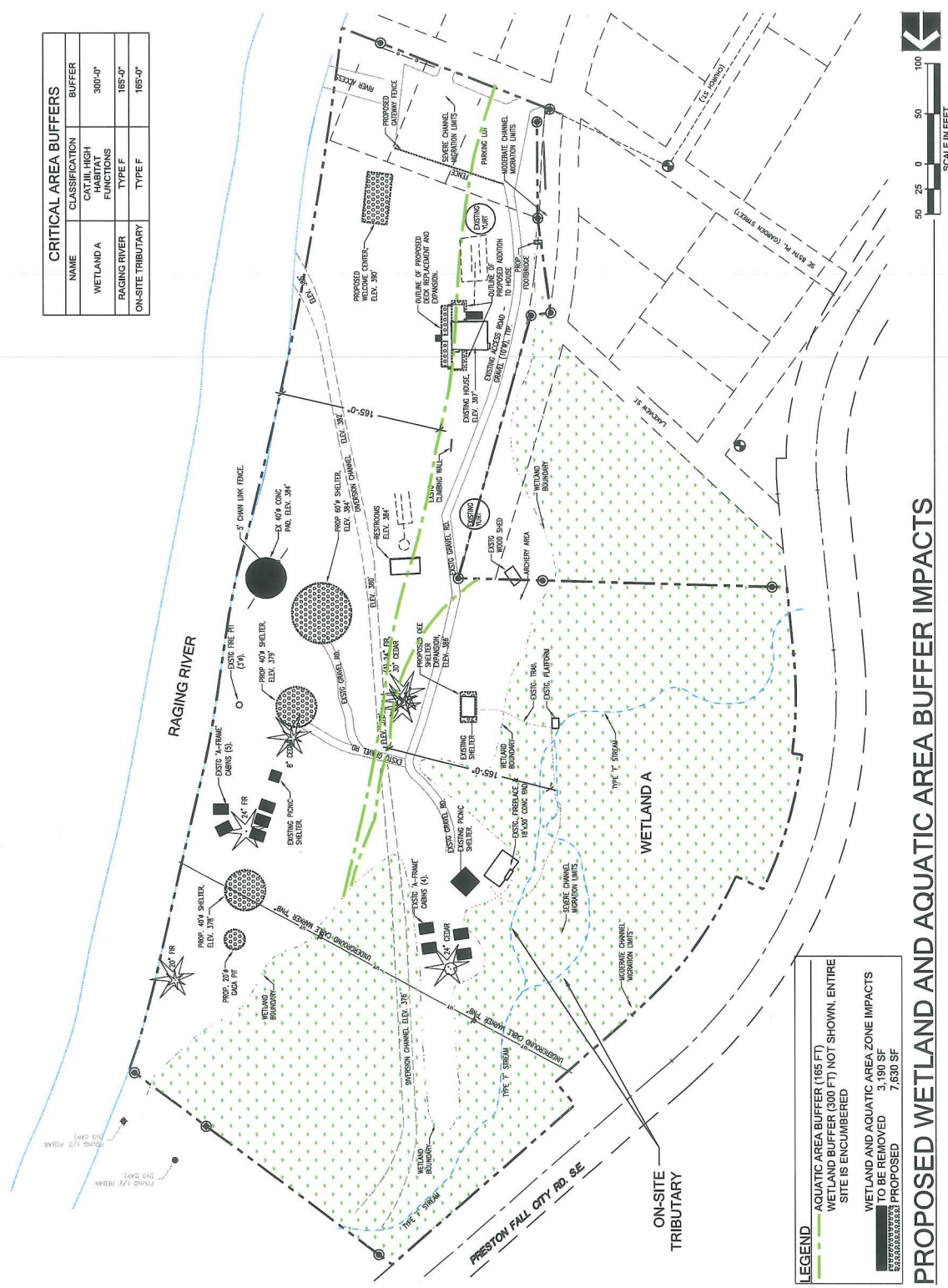






**DRAFT**  
 NOT FOR CONSTRUCTION  
 © Copyright: The Watershed Company

CRITICAL AREA BUFFERS		
NAME	CLASSIFICATION	BUFFER
WETLAND A	CAT III HIGH HABITAT FUNCTIONS	300'-0"
RAGING RIVER	TYPE F	165'-0"
ON-SITE TRIBUTARY	TYPE F	165'-0"



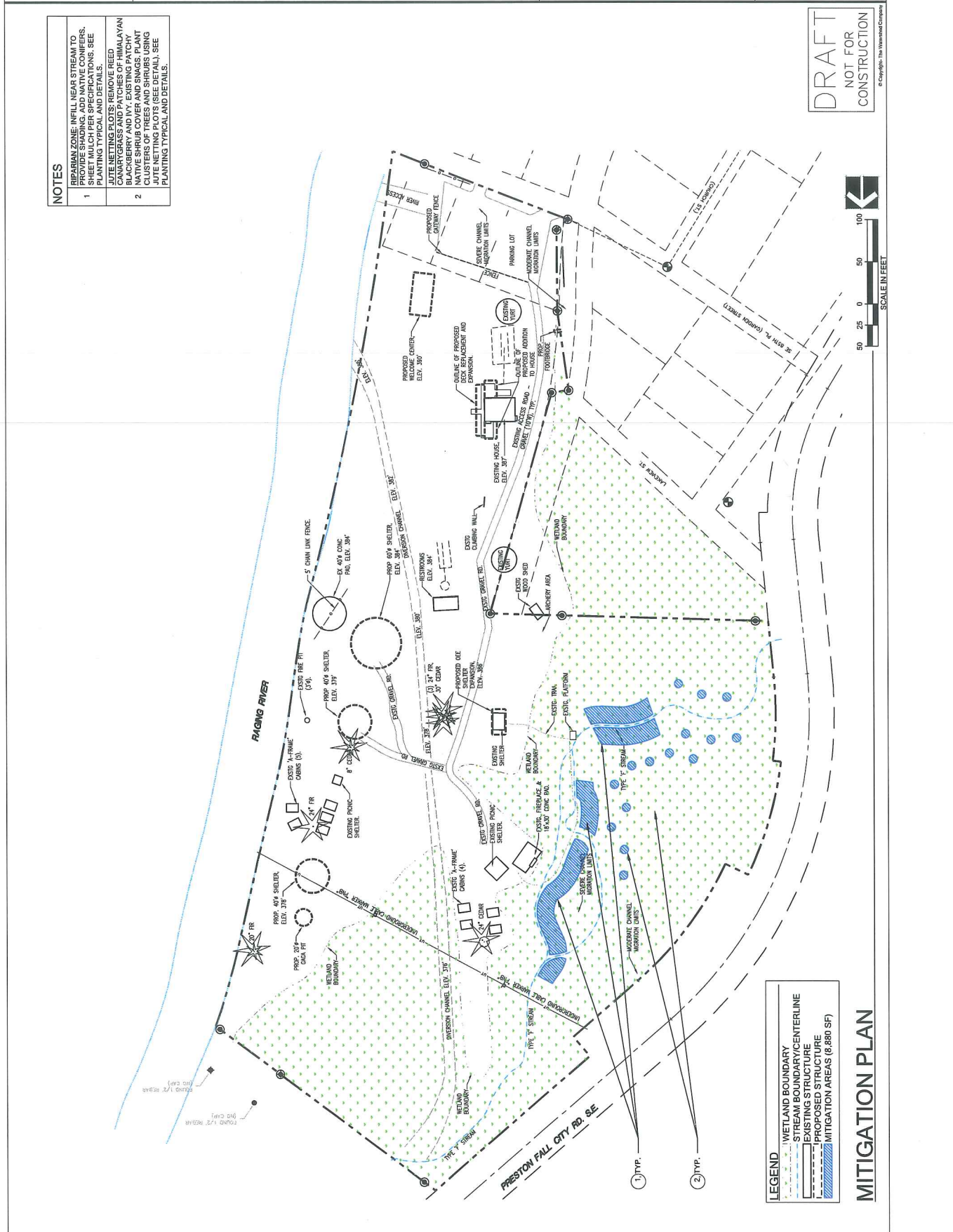






[illegible]

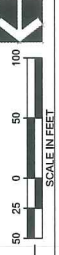
**Concubini. The Wicked Company**

















Overview

The proposed mitigation plan fulfills the requirements of KCC 21A.24.130, 340, and 360. The plan seeks to enhance wetland vegetation and riparian conditions for the interior stream. A net impact of 4,440 square feet would be mitigated through revegetation at a 2:1 ratio. Native trees and shrubs will be planted to reduce cover by invasive reed canarygrass and shade the interior stream. The mitigation plan includes the following species: western redbud, willow, Pacific willow, and red-bog dogwood.

Maintenance and Monitoring Plan

A 3-year maintenance and monitoring plan is proposed to ensure and document the plan meets performance standards.

Goals

- 1) Within the proposed mitigation areas, establish dense native vegetation that is appropriate to the ecoregion and site.
- 2) Where indicated on the plan, planted areas will remain substantially vegetated with a preponderance of native plants.
- 3) Provide native trees that will eventually increase shade and woody debris recruitment to Terry Creek.
- 4) Increase habitat cover, refuge and food resources for herptiles, small mammals, and invertebrates. In addition to cover and food resources, provide perching habitat for native birds.

Performance Standards

The standards listed below will be used to judge the success of the installation over time. If performance standards are met at the end of Year 3, the site will then be deemed successful and the performance security bond will be eligible for release by King County.

- 1) **Survival:** Achieve 100% survival of installed container-sized woody plants by the end of Year 1. This standard can be met through plant establishment or through replanting. Plants that do not survive by the end of Year 1 will be replaced by the end of Year 1 and shall achieve 50% aerial cover, on average, by the end of Year 3. Aerial cover in each plot shall be visually estimated.
- 2) **Species diversity:** Establish at least five native woody species by Year 3. Native volunteer species may count towards this standard. Establish at least one native coniferous tree species and at least one native deciduous tree species.
- 3) **Native cover:**
  - a. Within shrub- and tree-planted areas, achieve 20% cover of native shrubs and sapling trees by Year 2. Native volunteer species may count towards this cover standard.
  - b. Within shrub- and tree-planted areas, achieve 50% cover of native shrubs and sapling trees by Year 3. Native volunteer species may count towards this cover standard.
- 4) **Invasive cover:** With the exception of reed canarygrass, aerial cover for all non-native, invasive and noxious weeds will not exceed 10% at any year during the monitoring period. Reed canarygrass shall be kept clear of the drip-line or 18-inch radius of installed plants, whichever is greater.

Monitoring Methods

This monitoring program is designed to track the success of the mitigation site over time and measure the degree to which it is meeting the performance standards outlined in the preceding section.

An as-built plan will be prepared by the restoration professional (Watershed Company [(425) 822-5242] personnel, or other persons qualified to evaluate environmental restoration projects) prior to the beginning of the monitoring period. The as-built plan will be a detailed map of the site showing the location of all installed plants and documenting any departures in plant placement or other components from the proposed plan.

Monitoring will take place once annually in the fall for three years. Year 1 monitoring will occur within 30 days of the end of the growing season subsequent to successful installation as documented in the as-built plan.

The formal monitoring visit shall record and report the following in an annual report submitted to King County:

- 1) Visual assessment of the overall site.
- 2) Year-1 counts of live and dead woody plants by species (container-sized plants only). Year-1 survival plant cover estimates of leafed-out live stakes.
- 3) Counts of dead plants where mortality is significant in any monitoring year.
- 4) Estimate of native woody species cover.
- 5) Estimate of non-native, invasive weed cover. Estimate reed canarygrass cover separately.
- 6) Tabulation of established woody native species, including both planted and volunteer species.
- 7) Photographic documentation from at least five fixed reference points.
- 8) Any intrusions into or clearing of the planting areas, vandalism, or other actions that impair the intended functions of the mitigation area.
- 9) Recommendations for maintenance or repair of any portion of the mitigation area.

Construction Notes and Specifications

Note: Specifications for items in bold can be found below under "Material Specifications and Definitions."

Note: The Watershed Company [(425) 822-5242] personnel, or other persons qualified to evaluate environmental restoration projects, will monitor:

- 1) All site preparation
  - a. Invasive weed removal and soil preparation.
  - b. Mulch placement.
- 2) Plant material inspection
  - a. Plant material delivery inspection.
  - b. 50% plant installation inspection.
  - c. 100% plant installation inspection.

General Work Sequence

- 1) All plant installation is to take place during a frost-free period in the dormant season (September 15th - March 15th), for best survival.
- 2) Grow out Himalayan blackberry vines and roots where present in the planting areas.
- 3) Riparian mitigation zone:
  - a. Mow reed canarygrass to ground level.
  - b. Plant container plants and live stakes. See planting details on sheet (V-6).
  - c. Apply a four inch thick wood chip mulch layer to the planting area. Hold back mulch from the base of installed vegetation.
- 4) Jute netting plots:
  - a. Work with the restoration professional on-site to field-locate each jute netting plot.
  - b. Prepare planting subgrade by cutting reed canarygrass down to grade. Dig a planting pit for proposed center container-sized tree.
  - c. Cut jute netting larger than planting area in order to key into subgrade as shown on detail on sheet (V-6).
  - d. Dig trenches to secure jute netting.
  - e. Apply a four inch depth of coarse wood chip mulch to the planting plot.
  - f. Key one side of netting into subgrade and backfill with soil. Tamp soil in trench until netting is secure, without competing area to be planted. Secure with wood stakes spaced 3 feet on-center.
  - g. Key in remaining netting and stake until secured.
  - h. Cut hole in netting to install center tree.
  - i. Plant tree and live stakes. See planting details on sheet (V-6).
  - j. Water live stake and soak planting pits after planting.
- 5) Install a temporary aboveground irrigation system to provide full coverage to all plants within the restoration area.

Material Specifications and Definitions

- 1) **Irrigation system:** Automated system capable of delivering at least two inches of water per week from June 1 through September 30 for the first two years following installation.
- 2) **Jute netting:** Jute netting shall be of a uniform, open, plain weave of unbleached cotton or polyester fibers. Netting shall be 18 inches wide and 1/2 inch thick. Netting shall be in thickness by more than half of its normal diameter. Jute matting shall be furnished in rolled strips approximately 50 yards in length. Matting width shall be 48 inches with an average weight of 0.92 pounds per square yard. A tolerance of plus or minus one (1) inch in width and 5 percent in weight will be allowed.
- 3) **Restoration Professional:** Watershed Company [(425) 822-5242] personnel, or other persons qualified to evaluate environmental restoration projects.
- 4) **Wood chip mulch:** Arborist chips (chipped woody material) approximately 1 to 3 inches in maximum dimension (not sawdust or coarse bag mulch). This material is to be used for mulching and shall be free of weed seeds and other contaminants. This material is sold as "Animal Friendly Hog Fuel" at Pacific Toppole [(800) 884-7645]. Mulch must not contain appreciable quantities of garbage, plastic, metal, soil, and dimensional lumber or construction/demolition debris.

Contingencies

If there is a significant problem with the restoration areas meeting performance standards, a contingency plan will be developed and implemented. Contingency plans can include, but are not limited to soil amendment; additional plant installation; and plant substitutions of type, size, quantity, and location.

Maintenance

The site will be maintained in accordance with the following instructions for three years following completion of the construction.

- 1) Follow the recommendations noted in the previous monitoring site visit.
- 2) General weeding for all planted areas:
  - a. At least twice yearly, remove all competing weeds and weed roots from beneath each installed plant and any desirable volunteer vegetation to a distance of 18 inches. Weeding shall be done in the dormant season (September 15th - March 15th) and summer. Frequent weeding will result in lower mortality, lower plant replacement costs, and increased likelihood that the plan meets performance standards by Year 3.
  - b. More frequent weeding may be necessary depending on weed conditions that develop after plant installation.
  - c. Do not weed the area near the plant bases with string trimmer (weed whacker/weed eater). Native plants are easily damaged or killed, and weeds easily recover after trimming.
- 3) Replace mulch per plan as necessary to maintain a four inch thick layer, retain soil moisture, and limit weeds.
- 4) Inspect each plant found dead in the summer monitoring visits during the upcoming installation period. Plants shall be replaced per plan within 30 days of discovery, approved in writing by the Restoration Professional.
- 5) The applicant will ensure that water is provided for the entire planted area with a minimum of two inches of water provided per week from June 1 through September 30 for the first two years following installation. Less water is needed during March, April, May and October.



770 51st Street South  
Richmond VA 23033  
p 425.822.5242  
www.watershedco.com

YMCA CAMP TERRY  
IMPACT & MITIGATION ASSESSMENT PLAN  
PREPARED FOR YMCA OF GREATER SEATTLE  
SITE ADDRESS: PARCEL #332407903407  
31112 SE 85TH PLACE  
PRESTON, WA 98027

SUBMITTALS & REVISIONS		BY		DATE	
1	04-08-15	MSF	DESCRIPTION	1	04-08-15
2	05-05-15	MSF	REVIEW SET	2	05-05-15
3	06-12-15	MSF	DRAFT MITIGATION ASSESSMENT PLAN	3	06-12-15
4	06-12-15	MSF	IMPACT AND MITIGATION PLAN	4	06-12-15
5	06-12-15	MSF	IMPACT AND MITIGATION PLAN	5	06-12-15
6	06-12-15	MSF	IMPACT AND MITIGATION PLAN	6	06-12-15
7	06-12-15	MSF	IMPACT AND MITIGATION PLAN	7	06-12-15
8	06-12-15	MSF	IMPACT AND MITIGATION PLAN	8	06-12-15
9	06-12-15	MSF	IMPACT AND MITIGATION PLAN	9	06-12-15
10	06-12-15	MSF	IMPACT AND MITIGATION PLAN	10	06-12-15
11	06-12-15	MSF	IMPACT AND MITIGATION PLAN	11	06-12-15
12	06-12-15	MSF	IMPACT AND MITIGATION PLAN	12	06-12-15
13	06-12-15	MSF	IMPACT AND MITIGATION PLAN	13	06-12-15
14	06-12-15	MSF	IMPACT AND MITIGATION PLAN	14	06-12-15
15	06-12-15	MSF	IMPACT AND MITIGATION PLAN	15	06-12-15
16	06-12-15	MSF	IMPACT AND MITIGATION PLAN	16	06-12-15
17	06-12-15	MSF	IMPACT AND MITIGATION PLAN	17	06-12-15
18	06-12-15	MSF	IMPACT AND MITIGATION PLAN	18	06-12-15
19	06-12-15	MSF	IMPACT AND MITIGATION PLAN	19	06-12-15
20	06-12-15	MSF	IMPACT AND MITIGATION PLAN	20	06-12-15
21	06-12-15	MSF	IMPACT AND MITIGATION PLAN	21	06-12-15
22	06-12-15	MSF	IMPACT AND MITIGATION PLAN	22	06-12-15
23	06-12-15	MSF	IMPACT AND MITIGATION PLAN	23	06-12-15
24	06-12-15	MSF	IMPACT AND MITIGATION PLAN	24	06-12-15
25	06-12-15	MSF	IMPACT AND MITIGATION PLAN	25	06-12-15
26	06-12-15	MSF	IMPACT AND MITIGATION PLAN	26	06-12-15
27	06-12-15	MSF	IMPACT AND MITIGATION PLAN	27	06-12-15
28	06-12-15	MSF	IMPACT AND MITIGATION PLAN	28	06-12-15
29	06-12-15	MSF	IMPACT AND MITIGATION PLAN	29	06-12-15
30	06-12-15	MSF	IMPACT AND MITIGATION PLAN	30	06-12-15
31	06-12-15	MSF	IMPACT AND MITIGATION PLAN	31	06-12-15
32	06-12-15	MSF	IMPACT AND MITIGATION PLAN	32	06-12-15
33	06-12-15	MSF	IMPACT AND MITIGATION PLAN	33	06-12-15
34	06-12-15	MSF	IMPACT AND MITIGATION PLAN	34	06-12-15
35	06-12-15	MSF	IMPACT AND MITIGATION PLAN	35	06-12-15
36	06-12-15	MSF	IMPACT AND MITIGATION PLAN	36	06-12-15
37	06-12-15	MSF	IMPACT AND MITIGATION PLAN	37	06-12-15
38	06-12-15	MSF	IMPACT AND MITIGATION PLAN	38	06-12-15
39	06-12-15	MSF	IMPACT AND MITIGATION PLAN	39	06-12-15
40	06-12-15	MSF	IMPACT AND MITIGATION PLAN	40	06-12-15
41	06-12-15	MSF	IMPACT AND MITIGATION PLAN	41	06-12-15
42	06-12-15	MSF	IMPACT AND MITIGATION PLAN	42	06-12-15
43	06-12-15	MSF	IMPACT AND MITIGATION PLAN	43	06-12-15
44	06-12-15	MSF	IMPACT AND MITIGATION PLAN	44	06-12-15
45	06-12-15	MSF	IMPACT AND MITIGATION PLAN	45	06-12-15
46	06-12-15	MSF	IMPACT AND MITIGATION PLAN	46	06-12-15
47	06-12-15	MSF	IMPACT AND MITIGATION PLAN	47	06-12-15
48	06-12-15	MSF	IMPACT AND MITIGATION PLAN	48	06-12-15
49	06-12-15	MSF	IMPACT AND MITIGATION PLAN	49	06-12-15
50	06-12-15	MSF	IMPACT AND MITIGATION PLAN	50	06-12-15
51	06-12-15	MSF	IMPACT AND MITIGATION PLAN	51	06-12-15
52	06-12-15	MSF	IMPACT AND MITIGATION PLAN	52	06-12-15
53	06-12-15	MSF	IMPACT AND MITIGATION PLAN	53	06-12-15
54	06-12-15	MSF	IMPACT AND MITIGATION PLAN	54	06-12-15
55	06-12-15	MSF	IMPACT AND MITIGATION PLAN	55	06-12-15
56	06-12-15	MSF	IMPACT AND MITIGATION PLAN	56	06-12-15
57	06-12-15	MSF	IMPACT AND MITIGATION PLAN	57	06-12-15
58	06-12-15	MSF	IMPACT AND MITIGATION PLAN	58	06-12-15
59	06-12-15	MSF	IMPACT AND MITIGATION PLAN	59	06-12-15
60	06-12-15	MSF	IMPACT AND MITIGATION PLAN	60	06-12-15
61	06-12-15	MSF	IMPACT AND MITIGATION PLAN	61	06-12-15
62	06-12-15	MSF	IMPACT AND MITIGATION PLAN	62	06-12-15
63	06-12-15	MSF	IMPACT AND MITIGATION PLAN	63	06-12-15
64	06-12-15	MSF	IMPACT AND MITIGATION PLAN	64	06-12-15
65	06-12-15	MSF	IMPACT AND MITIGATION PLAN	65	06-12-15
66	06-12-15	MSF	IMPACT AND MITIGATION PLAN	66	06-12-15
67	06-12-15	MSF	IMPACT AND MITIGATION PLAN	67	06-12-15
68	06-12-15	MSF	IMPACT AND MITIGATION PLAN	68	06-12-15
69	06-12-15	MSF	IMPACT AND MITIGATION PLAN	69	06-12-15
70	06-12-15	MSF	IMPACT AND MITIGATION PLAN	70	06-12-15
71	06-12-15	MSF	IMPACT AND MITIGATION PLAN	71	06-12-15
72	06-12-15	MSF	IMPACT AND MITIGATION PLAN	72	06-12-15
73	06-12-15	MSF	IMPACT AND MITIGATION PLAN	73	06-12-15
74	06-12-15	MSF	IMPACT AND MITIGATION PLAN	74	06-12-15
75	06-12-15	MSF	IMPACT AND MITIGATION PLAN	75	06-12-15
76	06-12-15	MSF	IMPACT AND MITIGATION PLAN	76	06-12-15
77	06-12-15	MSF	IMPACT AND MITIGATION PLAN	77	06-12-15
78	06-12-15	MSF	IMPACT AND MITIGATION PLAN	78	06-12-15
79	06-12-15	MSF	IMPACT AND MITIGATION PLAN	79	06-12-15
80	06-12-15	MSF	IMPACT AND MITIGATION PLAN	80	06-12-15
81	06-12-15	MSF	IMPACT AND MITIGATION PLAN	81	06-12-15
82	06-12-15	MSF	IMPACT AND MITIGATION PLAN	82	06-12-15
83	06-12-15	MSF	IMPACT AND MITIGATION PLAN	83	06-12-15
84	06-12-15	MSF	IMPACT AND MITIGATION PLAN	84	06-12-15
85	06-12-15	MSF	IMPACT AND MITIGATION PLAN	85	06-12-15
86	06-12-15	MSF	IMPACT AND MITIGATION PLAN	86	06-12-15
87	06-12-15	MSF	IMPACT AND MITIGATION PLAN	87	06-12-15
88	06-12-15	MSF	IMPACT AND MITIGATION PLAN	88	06-12-15
89	06-12-15	MSF	IMPACT AND MITIGATION PLAN	89	06-12-15
90	06-12-15	MSF	IMPACT AND MITIGATION PLAN	90	06-12-15
91	06-12-15	MSF	IMPACT AND MITIGATION PLAN	91	06-12-15
92	06-12-15	MSF	IMPACT AND MITIGATION PLAN	92	06-12-15
93	06-12-15	MSF	IMPACT AND MITIGATION PLAN	93	06-12-15
94	06-12-15	MSF	IMPACT AND MITIGATION PLAN	94	06-12-15
95	06-12-15	MSF	IMPACT AND MITIGATION PLAN	95	06-12-15
96	06-12-15	MSF	IMPACT AND MITIGATION PLAN	96	06-12-15
97	06-12-15	MSF	IMPACT AND MITIGATION PLAN	97	06-12-15
98	06-12-15	MSF	IMPACT AND MITIGATION PLAN	98	06-12-15
99	06-12-15	MSF	IMPACT AND MITIGATION PLAN	99	06-12-15
100	06-12-15	MSF	IMPACT AND MITIGATION PLAN	100	06-12-15

DRAFT  
NOT FOR  
CONSTRUCTION

PROJECT MANAGER: NL  
DESIGNED: NL MSF  
DRAFTED: NL MSF  
CHECKED: NL MSF  
JOB NUMBER: 150322  
SHEET NUMBER: W7 OF 7

MITIGATION NOTES